



Ask an Economist: Aditi Routh and Fumiko Hayashi

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A Kansas City Fed study explores cryptocurrency ownership and found that financial literacy and risk tolerance vary by type of owners.



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Financial literacy, risk tolerance and U.S. cryptocurrency ownership

In 2022, 10% to 20% of U.S. adults were reported to own cryptocurrencies, such as Bitcoin and Ethereum. The original intent of cryptocurrencies was for transactions, as substitutes for traditional payment methods, but in the United States they now are most popular as an investment tool. According to the 2022 Survey of Household Economics and Decisionmaking (SHED), more than 80% of those who own cryptocurrency do so for investment, and about 30% do so for transactions.

A March 2024 *Research Working Paper* by Senior Policy Advisor Fumiko Hayashi and Economist Aditi Routh explored cryptocurrency ownership and found that financial literacy and risk tolerance vary by type of owners. Because of the highly volatile nature of the cryptocurrency market and its lack of consumer protections, owners without sufficient financial literacy and risk tolerance could be financially vulnerable. The full paper is available at [KansasCityFed.org/research](https://www.kansascityfed.org/ten/ask-an-economist-aditi-routh-and-fumiko-hayashi/).

Who are the U.S. consumers owning cryptocurrency?

Our study used the 2022 SHED, conducted by the Federal Reserve Board during the most recent “crypto winter,” a downturn in the cryptocurrency market.

We divided cryptocurrency owners into three groups based on their purposes for holding cryptocurrencies— for investment only (investors), for transactions only (transactors), and for a mix of investment and transactions (mix users). Then we examined how each group correlates with financial literacy and risk tolerance compared with consumers who do not own cryptocurrencies (nonowners).

We found that the three groups of cryptocurrency owners vary by demographic and financial characteristics, but compared with nonowners, all three groups tend to be male, be self-employed or work for family business, and use alternative financial services (such as nonbank money orders and payday loans) and buy-now-pay-later services.

What are some of the distinguishing characteristics?

Compared with nonowners, investors are significantly more financial literate, mix users are moderately more financially literate, but transactors are less financially literate. Investors and mix users are also significantly more risk tolerant while transactors are slightly more risk tolerant than nonowners.

Investors and mix users tend to be younger and moderately educated, but education has little association with transactors. Investors tend to be high-income individuals of high demand for credit, but income and demand for credit have no association with mix users and transactors.

Black and Hispanic crypto owners are more likely to be transactors or mix users but race has little association with investors. Transactors tend to have a lower credit score.

In summary, our findings suggest that cryptocurrency transactors may be particularly financially vulnerable as they tend to be less financially literate, a racial minority, and having a lower credit score, compared with the other two groups of cryptocurrency owners as well as nonowners.

What should the public understand about the risks of cryptocurrency ownership?

Ownership of cryptocurrencies involves risks not only for investment but also for transactions. For investment, the risks include high volatility of prices and lack of regulation by any central authority. For instance, the most recent crypto winter in 2022 saw extensive collapses in cryptocurrency prices, with about a \$2 trillion loss in market value. A large share of U.S. cryptocurrency owners lost money from investment during that time.

The risks involved in transactions with cryptocurrency include loss of funds because of a lack of consumer protections against fraud as well as lost private keys, bankruptcy of cryptocurrency exchanges or wallet providers, and high and ambiguous fees for making transactions.

For example, cash-to-cryptocurrency Bitcoin ATMs (commonly called BTMs) do not require identification for operation, exposing consumers and operators to the risk of fraudulent practices.

Are regulatory protections on the horizon for U.S. owners?

Several bills aimed at protecting consumers owning cryptocurrencies have been introduced in Congress, a few of which have gained attention and are awaiting action.

Some bills aim to build regulatory frameworks concerning digital assets, including cryptocurrencies, and define regulatory jurisdiction of cryptocurrencies for investment. Other proposed legislation has focused on cryptocurrency transactions, calling for greater scrutiny regarding BTM locations and identification of BTM users and recipients.

Meanwhile, several states have introduced or passed laws concerning cryptocurrency business activities. For example, California, Louisiana and New York require entities to obtain a license for conducting digital financial asset (or virtual currency) business activities. Further, California imposes requirements on operations of BTMs, including a \$1,000 daily transaction limit per customer, a cap on fees, and disclosures of terms, conditions, fees and charges.
